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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DINH, TUAN T

ART UNIT PAPER NUMBER

2841

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/632,138

Applicant(s)

YOUKER ET AL

Examiner

Tuan T. Dinh

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>07/03,12/04,06/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's election without traverse of Group I (claims 1-26) in the reply filed on 11/07/05 is acknowledged.

Drawings

2. The drawings are objected to because **"figures 5A-5C" are so dark**. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the **“flexible circuit tape includes a polyimide tape, see claims 6-7”** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-6, 8-12, 15-18, and 23-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim (U.S. Patent 6,778,040).

As to claims 1-5, 15-16, Kim discloses an apparatus as shown in figures 1-15 comprising:

one or more Input/output (V0) conductors (24; L1-L2), wherein the I/O conductors pass through a hermetic seal (21) such that a first end of the I/O conductors reside on a non-hermetic side of the hermetic seal and a second end of the I/O conductors reside on a hermetic side of the hermetic seal within a metal case (22) of the apparatus;

a printed circuit interconnect substrate (13, see figure 1) residing on the hermetic side of the hermetic seal, the substrate is mounted on a hermetic side of the seal (21) and made by ceramic or FR4 material (column 2, line 2, column 11, line 17) (claims 2-5); and

one or more ceramic chip capacitors (15; C1-C2), which are discrete capacitor or surface mount package (claims 15-16) mounted on the printed circuit interconnect substrate, wherein a first end of each capacitor is electrically connected via the interconnect to the second end of the I/O conductor and a second end of each capacitor

is electrically connected via the interconnect to the metal case (21), see column 2, lines 21-32.

As to claim 6, Kim discloses the printed circuit interconnect substrate in figures 13A-13D includes a flexible circuit tape (40).

As to claim 8, Kim discloses the printed circuit interconnect substrate is a multi-layer substrate (insulating layer and a ground layer).

As to claims 9-12, Kim discloses the printed circuit interconnect substrate includes an electrically conductive medium, which is a solder or conductive adhesive, see column 11, line 13, or a wire-bond, see figures 13A, 14A.

As to claims 17-18, Kim discloses the capacitors are included in a multi-chip package, and are adapted to filter electromagnetic interference (EMI).

As to claims 23-26, Kim discloses the I/O conductors that are pins, wires, or conductive traces formed on/in the circuit board, see figures 1-15.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim ('040) in view of Brendel et al. (U.S. Patent 6,529,103).

Regarding claims 19-22, Kim does not disclose the hermetic seal is a part of an implantable medical device and the seal material including a ceramic, epoxy, or glass.

Brendel et al teaches an improved internally ground feed through capacitor comprising a hermetic seal is a part of an implantable medical device and the seal material including a ceramic, epoxy, or glass, see column 1, lines 30-62.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a teaching of Brendel et al. employed in the apparatus of Kim in order to reduce cost and prevent the ingress of body fluids of implanted devices, and also, the hermetic seal material made by ceramic, epoxy, or glass is suitable for withstanding high temperature and thermal stress.

7. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Andresakis et al. (U.S. Patent 6,657,849).

As to claims 13-14, Kim does not disclose the capacitors having a dielectric breakdown voltage of about 1200 volts, or within a range of about 200 to 1500 volts.

Andresakis et al. shows a capacitor having a dielectric breakdown voltage of about 1200 volts, or within a range of about 200 to 1500 volts, see examples 1-5.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a teaching of Andresakis et al. employed in the apparatus of Kim in order to provide a high quality ceramic EMI/RFI filter capacitor applied in vary of an electronic device.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Chee (U.S. Patent 6,657,133).

As to claim 7, Kim does not disclose the flexible circuit tape includes polyimide tape.

Chee teaches a circuit board made by polyimide tape, column 2, lines 30-61.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a teaching of Chee employed in the apparatus of Kim in order to provide a flexible and high thermal stress for the circuit board.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Dinh whose telephone number is 571-272-1929. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Tuan Dinh', with a stylized, flowing script.

Tuan Dinh
January 12, 2006.